## abcam

### Product datasheet

### Human CNTF ELISA Kit ab264608

Recombinant SimpleStep ELISA

**1 References** 5 Images

Overview

**Product name** 

Human CNTF ELISA Kit

**Detection method** 

Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%	
Serum	8			3.6%	

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			2.8%

Sample type

Serum, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma, Cerebral Spinal Fluid

Assay type

Sandwich (quantitative)

Sensitivity

6.42 pg/ml

Range

46.88 pg/ml - 3000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	90	85% - 94%
Cell culture media	99	99% - 105%
Hep Plasma	93	89% - 97%
EDTA Plasma	93	87% - 105%
Cit plasma	91	90% - 92%
Cerebral Spinal Fluid	105	99% - 110%

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Assay time 1h 30m

**Product overview** 

**Assay duration** One step assay

Species reactivity Reacts with: Human

Human CNTF ELISA Kit (ab264608) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CNTF protein in cell culture media, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CNTF with 6.42 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Human Ciliary neurotrophic factor (CNTF) is a single chain polypeptide of 22.7 kDa. CNTF has been found to be a member of a limited family of neuropoietic cytokines that also includes Leukemia Inhibitory Factor and Oncostatin M. This family of cytokines are characterized by four distinctive  $\alpha$ -helical folds commonly associated with growth hormone. CNTF has been hypothesized to be a target-derived differentiation factor for developing neurons and glial cells. CNTF that is retained intracellularly has been suggested to be a lesion-associated molecule, providing damaged neurons with trophic or survival support following injury. Human CNTF shows 76.6% and 77.4% sequence homology with mouse and rat, respectively.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Pre-coated microplate (12 x 8 well strips)

# Properties

**Platform** 

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human CNTF Capture Antibody	1 x 600µl
10X Human CNTF Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

Notes

Components	1 x 96 tests
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human CNTF Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

**Function** CNTF is a survival factor for various neuronal cell types. Seems to prevent the degeneration of

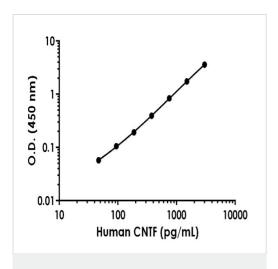
motor axons after axotomy.

**Tissue specificity** Nervous system.

Sequence similarities Belongs to the CNTF family.

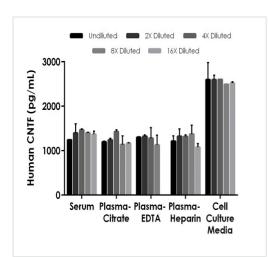
Cellular localization Cytoplasm.

### **Images**



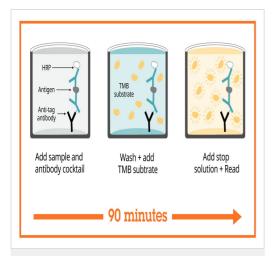
Example of human CNTF standard curve in 1X Sample Diluent PTR.

The CNTF standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



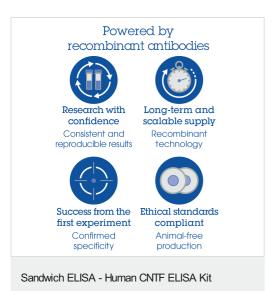
Interpolated concentrations of spiked CNTF in human serum, plasma and cell culture supernatant samples.

The concentrations of CNTF were measured in duplicates, interpolated from the CNTF standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 12.5%, plasma (citrate) 12.5%, plasma (EDTA) 12.5%, plasma (heparin) 12.5% and cell culture media 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



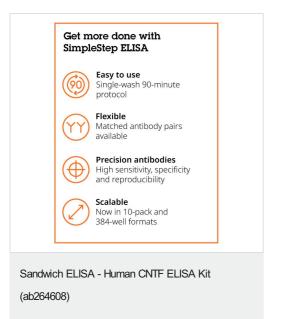
Sandwich ELISA - Human CNTF ELISA Kit (ab264608)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



(ab264608)

To learn more about the advantages of recombinant antibodies see **here**.



To learn more about the advantages of SimpleStep ELISA  $^{\circledR}$  kits see  $\underline{\text{here}}.$ 

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